



A guide for
young adults
with breast cancer



SUSAN F. SMITH
CENTER FOR
WOMEN'S CANCERS

Young
and **strong**[®]



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Welcome to Young and Strong,

a program for young adults with breast cancer. We have developed these resources to focus on you, a young person with newly diagnosed breast cancer.

You may feel scared and overwhelmed right now, but know that you can live a full and active life during and after breast cancer treatment!

Your doctor, nurses, and other care providers will help you understand the specifics of your breast cancer diagnosis. They will also go over your treatment options and help you make a plan. Young and Strong will give you extra information beyond this.

As a young adult, your questions and issues may be different from those who are older when diagnosed. Your interest in some of these issues, such as future fertility or genetics, may affect your treatment decisions. Young and Strong is designed to help you understand and manage these and other concerns.

Young and Strong is not meant to cover every issue you may face, but it can help you understand what the questions are and where to go for answers and support. If you have any questions, please talk to your providers, all of whom are part of the team, or contact us using the information below.

The Young and Strong Team

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Why did this happen?

Was it genetics, my environment, bad luck?

PEOPLE WITH BREAST CANCER OFTEN WONDER, “Why me?” Some find the answer in their family history. Or, some breast cancers have a hormonal link, while some are caused by exposure to a carcinogen (cancer-causing agent), such as radiation. For most people, though, there is no clear answer.

Younger adults are at much lower risk of developing breast cancer than older adults, but it is diagnosed at all ages.

Family history

The biggest risk factor for developing breast cancer at a young age is family history. This is especially true if a close relative (mother, father, sister, daughter) had it at a young age. About 15% to 20% of all breast cancers seem to have a family link. About 10% of breast cancers in younger adults are the result of inherited mutations (changes) to genes called *BRCA1* and *BRCA2*. Someone who has certain mutations of these genes can have a 50% to 85% chance of developing breast cancer in their lifetime. They also have a higher risk of ovarian cancer.

People more likely to carry one of the *BRCA* mutations include those who:

- Are diagnosed with breast cancer at a young age
- Have a personal or family history of ovarian cancer
- Have had breast cancer in both breasts
- Are from certain ethnic backgrounds, such as Dutch or Ashkenazi Jewish ancestry



Genetic counseling and testing

All young adults with breast cancer should consider testing for *BRCA1* or *BRCA2* mutations.

You might also choose to be tested for other genetic disorders that increase risk. Sometimes “panel” testing may be recommended, which tests for rare changes in a number of genes, including *BRCA1* and *BRCA2*. Your doctor or a genetic counselor can help you decide which, if any, tests are right for you.

If the results of genetic tests might affect your decisions about treatment, you should probably undergo genetic counseling

and testing early on. For example, if your treatment includes breast surgery, and you learn that you have a genetic mutation, it means you are also at higher risk of developing new breast cancers in any breast tissue that remains after the surgery. To address this increased risk, some people choose to have both breasts removed or to have their ovaries removed if they don't plan to have children (or any more children).

Everyone's situation is different. Talk with your doctor about whether genetic counseling and testing is right for you, and if so, when it should be done.



To learn more about cancer genetics, and the other topics in this booklet, visit youngandstrong.dana-farber.org. Also see our Resources handout or ask your doctor for more information.

Coping

A breast cancer diagnosis can bring up a wide range of emotions.

IT'S NORMAL to feel stress, denial, guilt, fear, anxiety, and like you've lost control. Allow yourself to feel whatever comes up, and use your support network.

Comfort and support

Support can mean different things, but usually involves connecting to others. This could be family, friends, and people from support programs, work, hobbies, leisure activities, and spiritual or faith communities. All of these people can listen to your concerns and share experiences.

Professionals can also be a vital source of support. They can help you learn more about breast cancer, treatment options, and what to expect. The important thing is to try not to go through this experience alone.

- Don't be afraid to ask for help, and accept it when it's offered. But only say yes if it will really help you, not to make the helper feel better.
- If family and friends want to help, let them pitch in with errands, housework, meals, and childcare.
- If you usually work through things by yourself, think about expanding your circle.
- Look for opportunities to express your feelings and share the weight of your diagnosis with others going through the same thing. Most people find this essential.
- Websites and online discussion groups can be helpful, but try not to read too much. There's a lot of inaccurate and misleading information online. Go to trusted sites, and only read what's helpful to you! (See our "Resources" handout.)
- Trust yourself to find comfort in ways that work for you.

Control

Some people diagnosed with breast cancer feel a loss of control over their lives. Some feel overwhelmed by the decisions they have to make. This is normal. Knowing what to expect is key to staying in control. Learn as much as you can (or as much as you want to) about breast cancer, and learn how to advocate for yourself. Also:

- Build an honest, open relationship with your doctor. Ask about clinical trials, treatment options, and potential side effects. Working as a team will help you trust each other. Remember, doctors can make treatment recommendations, but you will need to make decisions together.
- Work with your doctor to include other professionals on your team. Social workers or counselors can listen and lend support. They can teach you how to manage breast cancer issues and how to cope with your feelings.
- Continue to do everything you can in your daily life — at your own pace. You may find stability in going to work every day or by keeping your daily routine as normal as possible. You may be able to manage household chores, errands, grocery shopping, or childcare just fine. However, if these things get tougher over time, ask for help!

Asking for help

Be specific about what you need. For example:

- Instead of only saying, “Can you come to some doctors’ appointments?” also say, “I have appointments every other Tuesday at 10. Which Tuesdays work for you?”
- Let someone set up a schedule for meals, dog walking, etc. (lotsahelpinghands.com)
- Give people specific days they could cook or bring meals for you.
- Ask a relative or friend to pick your child up from school on days when you need it.

Concerns about side effects

The goal of breast cancer treatment is to offer you the best possible chance of long-term health. However, treatments often have side effects, and each person experiences them differently. Some side effects come and go quickly, while others last longer.

Your clinical care team will review the risks and benefits of recommended treatments in detail. Talk with them about your concerns and how to manage the side effects that worry you the most. Treatment often causes short-term symptoms and can (rarely) cause serious problems. The benefits of treatment usually far outweigh the risks.

Silver linings

Being diagnosed with breast cancer can be a devastating experience, especially in the beginning. Over time, however, you will move forward and likely feel better. Some people even find that positive things come from their experience.

Many survivors say that, in time, their diagnosis gave them a new appreciation for life or the courage to make changes they otherwise might not have. Some say support networks had a profound impact. Some make new friendships, rekindle old ones, and find unexpected inner strength. Many survivors help others cope with breast cancer.

Grief and loss

Breast cancer and its treatment can change you and your life in ways that make you angry or sad. You may need time to grieve the losses you’re experiencing and accept them. Recognize your feelings, and get the help and support you need. Speaking with your provider and/or a mental health professional (e.g., social worker, therapist, or psychiatrist) in addition to your breast cancer care team can help you through difficult times.

To learn more about coping with emotions during and after treatment, plus the other topics in this booklet, visit youngandstrong.dana-farber.org. For further support, talk to a social worker.

Having children after breast cancer

MANY YOUNG ADULTS with breast cancer wonder how cancer and its treatment will affect their fertility (ability to become pregnant).

Considering pregnancy after a breast cancer diagnosis can be difficult for patients and their loved ones. If you decide to try for pregnancy, it may be harder after breast cancer treatment than it otherwise would have been.

This section answers some of the most common questions on this topic. It can also be helpful to speak with your cancer doctor, a fertility expert, or a social worker or another counselor.

Safety

Is it safe for me to become pregnant after breast cancer?

Yes, we believe it is safe. Studies show that becoming pregnant after your breast cancer treatment ends does not increase your chances of dying from breast cancer. However, studies are limited, and some experts remain concerned. People with a history of breast cancer are still at risk of recurrence during and after a pregnancy. (Recurrence means breast cancer coming back in the breast area or in other parts of the body.)

Is it safe for my future child if I become pregnant after breast cancer?

Yes. Your history of breast cancer treatment should not increase the risk of birth defects in your future child(ren). This is true as long as treatment medications have been out of your system for at least three months before you get pregnant.

Exposure to chemotherapy and hormonal therapy during pregnancy can cause birth defects to a fetus (unborn child), especially during the first trimester. Use contraception (choose non-hormonal methods like condoms or a copper IUD, if necessary for your kind of cancer) to avoid getting pregnant during these treatments.

If you might want to get pregnant after your treatment, talk with your doctor as early as possible.

Treatment and its effect on fertility

Each person's situation is different. Talk with your doctor about your disease, the best treatment options, and what fertility means to you. Also discuss whether to be proactive about preserving your fertility through treatment. A fertility specialist can do tests to see if you are likely to be able to get pregnant or not. For more information, read "Protecting fertility" on the next page.

The two main treatment options for young adults with breast cancer are hormonal therapy and chemotherapy.

Hormonal therapy

Hormonal therapies, such as tamoxifen, do not damage the ovaries, although they can make periods irregular. However, over the standard 5 to 10 years of treatment that are often recommended, your fertility will decrease naturally.

For example, if you are diagnosed at age 30, you will be less fertile at 35, with or without hormone therapy.

Some people decide to stop hormonal therapy early, so they can try to become pregnant. This may reduce the potential benefits of completing the treatment.

Researchers are studying this, so talk to your oncologist/doctor if you want to consider this.

Chemotherapy

Chemotherapy does damage the ovaries directly and reduces fertility. Some types are more damaging than others. While some people continue to have regular menstrual cycles throughout chemotherapy treatment, many may experience amenorrhea (ay-MEN-eh-REE-uh)—when menstrual periods stop temporarily—or menopause, when periods stop permanently.

Sometimes periods re-start when chemo-therapy ends, especially in adults 40 or younger, but sometimes they do not. The older you are, the more likely you are to experience full menopause and/or infertility after chemotherapy.

Most current studies show a strong relationship between long-term amenorrhea and infertility (not being able to get pregnant). However, having amenorrhea after cancer treatment does not necessarily mean someone is infertile. On the other hand, if someone has menstrual periods after breast cancer treatment, their ovaries might still be damaged, and they may be infertile.

For information on ways to protect fertility, see the next page. For information on menopause, see page 15. You can also speak with your doctor.

To learn about breast cancer treatment during pregnancy, and the other topics in this booklet, visit youngandstrong.dana-farber.org. For more detailed information, talk to your doctor.

Protecting fertility

IF YOU MIGHT want to become pregnant in the future, talk with your doctor. Some fertility procedures may require you to make decisions and take action fairly quickly to avoid delays in your cancer treatment.

Decide if you want to see a fertility specialist soon, or if you want to wait and think about your options.

Some procedures may increase your ability to have a future pregnancy. However, each has risks and considerations. For example:

- Some are expensive and unlikely to be covered by insurance, but fertility treatment providers will be able to help you with resources.
- Some are highly experimental and may pose additional risks to you.
- Some are only available in a few locations.

None of these methods guarantee pregnancy, but one might be right for you. Talk with your doctor and a fertility specialist to make a plan.

Cryopreservation

Cryopreservation (cry-oh-prez-er-vay-shun) refers to procedures that involve freezing.

Freezing a fertilized egg (also called embryo freezing)

1. A fertility doctor gives you hormones to make your ovaries produce lots of eggs.
2. The unfertilized eggs are removed from your body then fertilized with sperm (from a partner or a donor).
3. Fertilized eggs (embryos) are frozen and stored for later use.
4. After your breast cancer treatment is over, embryos can be thawed and put into your uterus or someone else's (a surrogate).

Freezing an unfertilized egg

1. A fertility doctor gives you hormones to make your ovaries produce lots of eggs.
2. The unfertilized eggs are removed from your body, frozen, and stored for later use.
3. After your breast cancer treatment is over, the eggs can be thawed and fertilized with sperm.

Note: This method is now nearly as successful as embryo freezing. Especially if you don't have a partner now and don't want to use a sperm donor, this may be the right option for you.

Freezing ovarian tissue

1. Before your cancer treatment begins, a piece of your ovary is removed and frozen. This helps to protect the tissue from damage during chemotherapy.
2. Once your treatment is done and you are ready to try to get pregnant, the tissue is put back in your body.

Note: This method is highly experimental. There have been only a small number of successful pregnancies using it.

Medical ovarian suppression

This involves getting hormone shots during cancer treatment to shut down your ovaries. This may protect them from damage by chemotherapy.

Recent studies suggest it may preserve periods and fertility. Talk to your doctor if you are interested in this.

Donor options

Donor eggs or oocytes (oh-oh-sites)

1. After you finish your breast cancer treatment, you can use donated eggs if you become infertile.
2. These eggs are fertilized with sperm (from a partner or a donor).
3. The resulting embryo is put into your uterus.

Donor embryos

1. After you finish your breast cancer treatment, you can use a fertilized embryo from an egg donor and sperm donor if you are infertile.
2. The donated embryo is put into your uterus.

Other options

Other ways to bring a child into your life after breast cancer include:

- Adoption (domestic or international)
- Adoption from within the foster care system
- Sponsoring foster children

Grief, acceptance, and moving forward

Fertility after breast cancer can be a difficult issue. Maybe you've been told to wait or that pregnancy may not be possible. Dealing with this potential loss can lead to intense sadness and anger. It may take time to adjust and accept your situation. Be patient with yourself. Getting good, clear information and a realistic sense of what may or may not be possible often helps. Speak to your provider about your concerns. Find a counselor, a therapist, or others who have been through this process. For more on coping, see page 6 or our "Resources" handout.

For more about fertility preservation and the other topics in this booklet, visit youngandstrong.dana-farber.org. Talk to your doctor to get more detailed information.

Lose the cancer, not your style!

Beauty during and after breast cancer

TREATMENT FOR BREAST CANCER may change the way you look, which can affect how you feel about yourself. You might feel loss, sadness, or stress. But take heart. There are ways to soften the impact of these changes and feel better.

Hair loss and head covers

Hair loss can be one of the hardest parts of cancer treatment. Most insurance companies will cover the cost of a wig. If you expect to lose your hair, you may want to consider a wig, hat, or scarf. Most communities have local wig resources to help with this. There are many options to fit every style. Some people find they help them feel better.

Chemotherapy can also cause you to lose your eyelashes and eyebrows. Some people find that special makeup techniques and false eyelashes make them feel more like themselves.

Mastectomy

If part of your treatment, breast removal (mastectomy) can be a major change to your body and how you feel about it. Reconstructive breast surgery helps many people feel better about their appearance and feel that their clothes fit better.

If you are thinking about a mastectomy, take the time to discuss it with your doctor. You can also talk about reconstruction options with a plastic surgeon. If you

choose not to have reconstruction or need to delay reconstruction, another option is to ask your doctor to prescribe a breast prosthesis (a fake breast, which fits inside a special bra). Some people who have breast reconstruction opt to have a nipple that looks 3-dimensional tattooed on their breast, instead of having one built using other tissues. Talk to your surgeon if you would like more information about this option.

You are not alone

Physical changes caused by treatment can be overwhelming. But you are not alone. Discuss any questions or issues with your doctor. Get help through your clinic; talk with social workers, others in breast cancer support groups, and survivors who have been there. Make use of national programs that provide makeup tips for people undergoing cancer treatment (see our "Resources" handout for some programs). Read *You Can Do This! Surviving Breast Cancer without Losing Your Sanity or Your Style* by two survivors.

For more information, visit Dana-Farber's Friends' Place (fashion and skincare advice, and fittings): dana-farber.org/friendsplace, or ask your doctor.

Work and school

Many young adults with breast cancer keep working or going to school during their treatment.

WHETHER YOU ARE ABLE TO WORK or go to school depends on your treatments, their side effects, your preferences, and the activities involved with your work or studies.

Telling your boss and colleagues

You are not required to tell your boss or supervisor about your diagnosis. But you may decide you want to, because you may need accommodations for appointments. If you decide to, there is no right or wrong way to do it. Before you do, decide how much you are going to share—just the diagnosis? Your treatment plan? Other information?

Think about whether you're going to ask for accommodations (changes to your work space, equipment, schedule, etc.). If you're not sure yet, say, "Right now I don't know what I will need, but I'll get back to you when I know more."

If you don't want to tell colleagues about your diagnosis, you don't have to. However, co-workers may be a great source of support. People have been known to chip in by raising money, providing personal help, and donating vacation days to colleagues dealing with cancer.

Asking for accommodations

Federal law requires employers to provide "reasonable accommodations" for anyone who has a disability. According to the ADA, "cancer qualifies as a disability when the disease or its treatment hinders your 'major life activities.'" Accommodations can vary greatly, depending on a person's need.

Legal rights

Under the Americans with Disabilities Act (ADA), cancer can qualify as a disability, on a case-by-case basis. Also, the Family Medical Leave Act (FMLA) of 1993 protects the jobs of people diagnosed with cancer. To qualify, you must have worked for an employer for at least 12 months before the FMLA request and worked more than 1,250 hours in that calendar year. Employers with fewer than 50 employees do not have to follow FMLA regulations.

For more on these topics, and the others in this booklet, visit youngandstrong.dana-farber.org. Also refer to our Resources handout or talk to a social worker.

Sex and intimacy

BREAST CANCER and its treatment can lead to issues around sexuality.

You may experience sexual side effects like loss of libido (desire) and vaginal dryness. But there are strategies for dealing with these issues if they happen.

Dealing with sexual side effects

Breast cancer treatments can lower estrogen levels in your body. This can cause vaginal thinning and dryness, and that can make intercourse uncomfortable. If you have vaginal dryness, use a vaginal moisturizer (like Hyalo Gyn or Replens) two or more times a week. Lubricants can also make sex more comfortable. Water-based, unscented lubricants like Astroglide, Liquid Silk, and Sliquid Organics are less likely to cause an infection.

Variations in estrogen levels can also cause breast sensitivity or changes in arousal or desire. If you have some of these changes, be gentle and patient with yourself. If you have a partner, talk about what is uncomfortable and what feels good.

Also, while you are being treated for breast cancer, use contraception whenever you have sex. Choose a contraceptive without hormones, like condoms or a copper IUD.

For information about the effectiveness of birth control methods, visit [1.usa.gov/1XITESj](https://www.1.usa.gov/1XITESj).

For more information on sexual health and intimacy, visit youngandstrong.dana-farber.org. Don't be shy to bring it up with your doctor!

Menopause vs. menopausal symptoms

INDUCED–PREMATURE–MENOPAUSE happens when health issues cause your menstrual cycle to stop permanently. Two treatments that can cause menopause in young adults with breast cancer are chemotherapy and oophorectomy (oh-oh-for-ECK-tuh-mee), which is surgical removal of the ovaries.

Menopausal symptoms and premature menopause

Most young breast cancer patients do not go through menopause (permanent stopping of periods) right away with treatment, even if they've had chemotherapy.

However, even if periods continue, chemotherapy can lower estrogen levels and lead to symptoms of menopause. In addition, medications like ovarian suppression shots, or those that block estrogen (like tamoxifen) or lower estrogen (like aromatase inhibitors such as exemestane, anastrozole, and letrozole) may also cause symptoms, even though their effects may be temporary. These hormonal treatments may also cause changes in periods without causing menopause.

Managing menopause symptoms

Symptoms of menopause include hot flashes, night sweats, sleep problems, memory problems, depression or anxiety, and urinary and vaginal symptoms.

To manage hot flashes, avoid common triggers like stress, spicy foods, caffeine, and smoking. There are also medications that can help to relieve hot flashes. If you're seeking more restful sleep, keep your room quiet and dark, and try to go to bed at the same time each night. If you are experiencing anxiety or depression, you may benefit from therapy, medication, or both. Speak to your doctor about any urinary symptoms, and try Kegel exercises, which strengthen the muscles in your pelvic floor (muscles that support the organs inside your pelvis).

Getting regular exercise is also an effective way to manage several menopause symptoms: it's good for your mood, helps you sleep better, and helps you reach or maintain a healthy weight.

For more information about menopause symptoms, and the other topics in this booklet, visit youngandstrong.dana-farber.org or talk to your doctor.

Helping loved ones cope

DURING YOUR DIAGNOSIS and treatment, your loved ones may need support to help them cope.

Young children

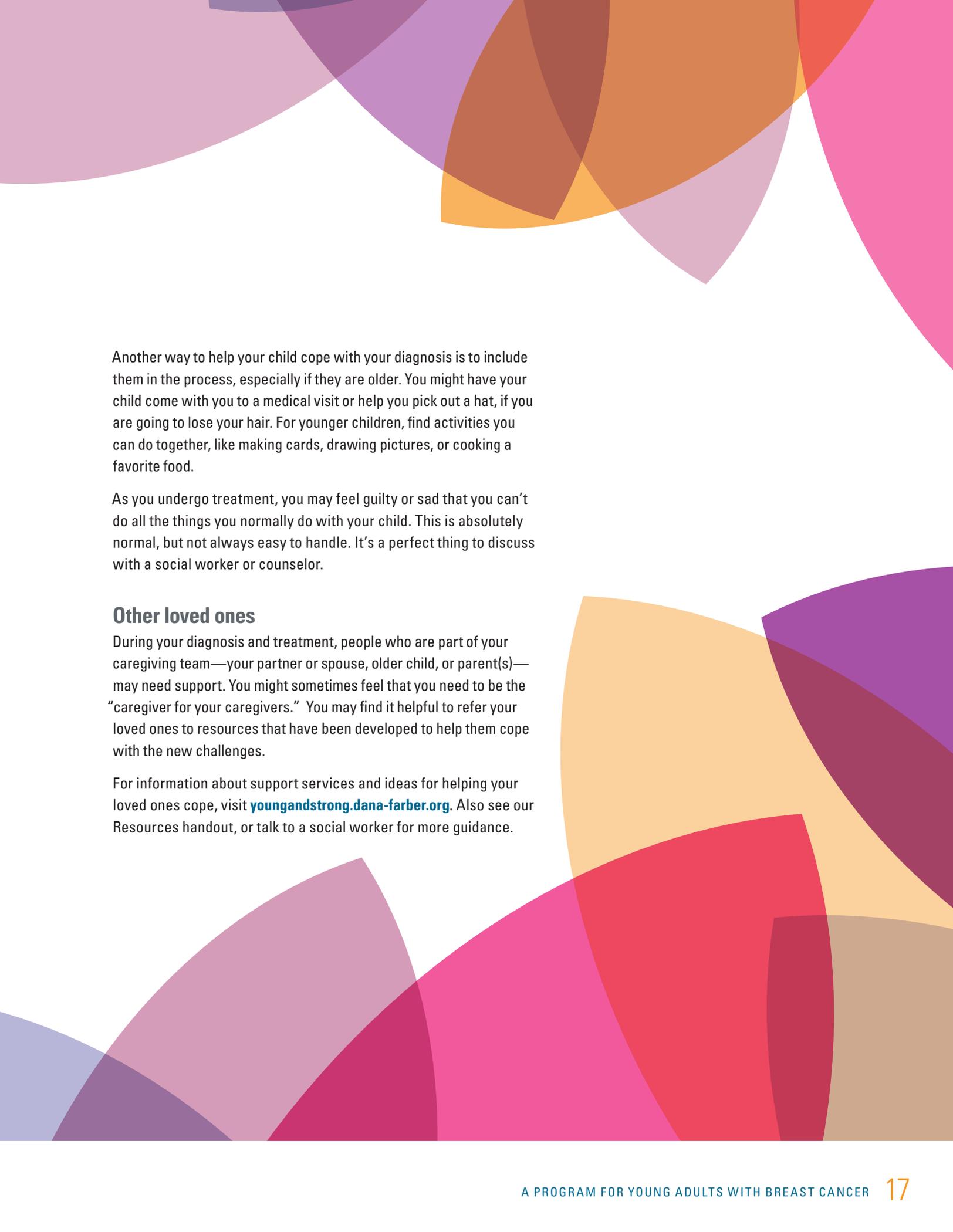
If you are trying to decide when to talk to your child about your diagnosis, trust your instincts. Some parents know that they will tell their kids right away. Some wait until they have more information. Others wait until their children are a bit older to have this talk.

Decide what your child needs

When talking with your child, figure out in advance how much you want to share. You don't need to tell kids everything, but what you do say must be the truth. Assure your child that you will answer questions as honestly as you can. If you don't have the answer to a question, say so. But also say that you'll share the answer as soon as you get one. Keep your child informed along the way, and be ready to repeat important information as often as needed.

Give it time

Your child may not be able to absorb the news of your cancer right away. But it will sink in over time. Be patient and accept their reactions. Families often find it helpful to keep things as "normal" as possible. Sticking to your family's regular daily schedule can give your child a sense of stability.



Another way to help your child cope with your diagnosis is to include them in the process, especially if they are older. You might have your child come with you to a medical visit or help you pick out a hat, if you are going to lose your hair. For younger children, find activities you can do together, like making cards, drawing pictures, or cooking a favorite food.

As you undergo treatment, you may feel guilty or sad that you can't do all the things you normally do with your child. This is absolutely normal, but not always easy to handle. It's a perfect thing to discuss with a social worker or counselor.

Other loved ones

During your diagnosis and treatment, people who are part of your caregiving team—your partner or spouse, older child, or parent(s)—may need support. You might sometimes feel that you need to be the “caregiver for your caregivers.” You may find it helpful to refer your loved ones to resources that have been developed to help them cope with the new challenges.

For information about support services and ideas for helping your loved ones cope, visit youngandstrong.dana-farber.org. Also see our Resources handout, or talk to a social worker for more guidance.

Healthy living

LIVING WITH BREAST CANCER presents many challenges. It can affect your body, your mind, and the ways you look after yourself and others.

In general, follow the same healthy-living guidelines recommended to all adults:

- Maintain a healthy weight
- Eat lots of fruits and vegetables
- Avoid fatty foods
- Be physically active
- Don't smoke
- Don't drink alcohol excessively
- Use sunscreen

There are also healthy-living recommendations just for people with breast cancer.

Weight

Chemotherapy treatment may contribute to weight gain because its effects can make it hard to stay active. Some people also gain weight with menopause.

Some evidence shows that if you are overweight when you're diagnosed or gain weight after that, you may have an increased risk of cancer recurrence. As a result, doctors recommend that people with breast cancer try to get to an ideal weight and maintain it.

Diet and nutrition

A well-balanced diet can help you stay healthy during and after treatment. It can also help you keep your energy up during chemotherapy and radiation.

Young adults with breast cancer—like all adults—should eat a diet high in fruits and vegetables, and low in fat. It's unclear whether eating a certain amount of fruits and vegetables can reduce your cancer risk. It is clear that fruits and vegetables are good for you in general.

Eat healthy (complex) carbohydrates, rather than less healthy (simple) ones. Complex carbs include whole-wheat pasta, brown rice, and legumes like black beans and lentils. Simple carbs include things like cakes, pies, cookies, and white rice and pasta. Along with regular exercise, eating well can help you reach and stay at a healthy weight.

Pay special attention to these foods and drinks:

SOY. Soy-based products (e.g., soy milk and tofu) are a good source of protein. But, soy foods often contain isoflavones (eye-so-FLAY-vonz). These substances affect the body like a weak dose of estrogen. High levels of estrogen have been linked to increased breast cancer risk.

Some studies suggest that high doses of soy can increase the growth of breast cancer cells. Others suggest that soy products may inhibit it. Research is limited. It is not clear whether the amount of soy someone might eat in a day can cause breast cancer to grow.

The current recommendation is that it's probably OK to eat or drink soy products **in moderation**. But avoid high amounts of soy isoflavone, including supplements, such as concentrated pills or powders.

VITAMIN D. Studies show that people with breast cancer often have low levels of vitamin D, and researchers are studying why. Low vitamin D levels can contribute to bone thinning and osteoporosis (OSS-tee-oh-puh-RO-suss), a disease that causes fragile bones. Some early studies suggest that low vitamin D may also contribute to breast cancer risk.

Patients should take a vitamin D supplement, but there is disagreement about how much. Current guidelines recommend 400 IU (International Units) to 1,000 IU per day. Most over-the-counter multivitamins contain this range, but talk with your doctor about what's right for you.

To help your body process vitamin D, be sure to get the recommended amount of calcium: Before menopause, you should get 1,000 mg of calcium per day. After, you should get 1,500 mg per day, ideally in your diet, rather than supplements.

ALCOHOL. If you drink alcohol, do so **only in moderation**. Drinking alcohol seems to increase a person's risk of breast cancer, but no one is sure why. Some researchers believe adults who drink a lot of alcohol may have high levels of estrogen in their blood, and high estrogen levels have been linked to increased breast cancer risk.

Several other studies have explored whether adults who drink alcohol after breast cancer have a higher risk of breast cancer recurrence. However, the results are inconsistent. Most studies do not show a clear link between drinking alcohol and breast cancer recurrence. But we still have a lot to learn.

A piece of conflicting information about alcohol is that young adults with breast cancer sometimes go through early menopause, which may raise their risk of heart disease slightly. Alcohol has been shown to protect against heart disease.

Given these competing risks, only drink alcohol in moderation (if you drink it at all). On average, this means having no more than 1 serving of wine, or the equivalent, per day.*

Also, if you drink alcohol, getting enough of the vitamin folic acid (also called folate) in your diet may help. It may offset the potentially increased risk of breast cancer associated with alcohol use. The recommended daily allowance of folate is 400 mcg (micrograms) per day.

For more on nutrition and healthy living resources, and the other topics in this booklet, visit youngandstrong.dana-farber.org or ask your doctor.

* A full serving of alcohol is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of hard liquor.

Physical activity

IT MAY SEEM STRANGE, but physical activity may be the most important thing you can do for yourself during and after your breast cancer treatment.

Why exercise is wise

Being physically active is one of the most important things you can do for your health. It can help you control your weight, lower your risk of heart disease and diabetes, and maintain healthy bones. It may even lower the risk of breast cancer recurrence.

Research shows that young adults with breast cancer often exercise less and gain weight during treatment. There may be good reasons for this: You may be tired, depressed, or not feeling well. But studies tell us it's important to keep up an exercise routine, particularly young people with breast cancer, because they are more likely to gain weight during treatment than older people with breast cancer.

Also, young breast cancer patients who go through early menopause are at a higher risk of other health problems, like bone loss, diabetes, lymphedema (painful swelling) in the arm and chest area (see page 21), and heart disease. Heart disease is the number-one cause of death, but regular exercise can help prevent it.

Studies suggest that exercising less and/or gaining weight may increase the chance of breast cancer recurrence. A few new studies have found that survivors who got 3 or more hours of aerobic activity every week were less likely to have their cancer return (up to 50% less likely). Several studies also show that people who exercise after breast cancer feel better and stronger than those who don't.

Expert recommendations

Experts make 3 main physical activity recommendations for young adults with breast cancer:

- Get back to your normal daily activities as soon as possible after surgery (if your treatment includes surgery).
- Continue with your daily routine (including physical activity) as much as you can during and after non-surgical treatments, like chemotherapy.
- If you don't exercise regularly, talk with your doctor about a safe way to get started and how to get the recommended amount (see recommendations on page 21).

Is physical activity safe for me?

Yes! In general, if you were in good health before you were diagnosed, it should be safe to exercise now. However, it's always good to talk with your doctor before beginning any new exercise program. Also, possible side effects of treatment, such as diarrhea or vomiting, may contribute to dehydration. During any kind of activity, drink plenty of water and listen if your body asks you to slow down or stop.

What kind of exercise?

If your doctor says exercise is OK, get a good amount of moderate, aerobic (cardio) activity. Aerobic activity is any exercise that makes you breathe a little heavier and get a little bit sweaty. Heavier breathing means your body is working harder, which is good for your heart and lungs.

Experts recommend that everyone (with or without a history of breast cancer) get:

- 150 minutes or more of **moderate**-intensity aerobic activity each week (e.g., brisk walking) or
- 75 minutes or more of **vigorous** aerobic activity each week (e.g., running or spinning)

The great news is that moderate and vigorous activity are both linked with longer life. That means that brisk walking is just as good for you as running. One great way to reach 150 minutes of exercise a week is to **briskly** walk at least 10,000 steps a day. Walking is good because you can do it anywhere and don't need any equipment.

The American College of Sports Medicine (ACSM), the world's largest organization of sports medicine and exercise science experts, developed exercise guidelines for people undergoing cancer treatment and for cancer survivors. According to ACSM, walking is a safe type of exercise for almost all people with cancer.

The story on strength training

Strength training, or lifting weights, helps build strong muscles, bones, and joints. It also seems to boost metabolism (the way your body turns food into energy). Include strength training in your exercise routine.

However, ACSM cautions people with breast cancer to be careful about upper-body exercises (including some yoga poses). Before starting upper-body exercises, talk with an exercise professional familiar with the needs of patients in breast cancer treatment. Ask your doctor for a recommendation or visit ACSM's website ([acsm.org](https://www.acsm.org)).

Lymphedema. Lymphedema is when fluid builds up in the tissues of a part of the body and causes painful swelling. After breast cancer surgery or radiation, you may develop or be at risk for developing lymphedema. If so, it will most likely affect your arm or breast/chest area on the side of your body where you received treatment.

Our understanding of lymphedema has changed recently. Studies now show that moderate upper-body strength training does not seem to increase risk of developing lymphedema. In fact, moderate upper-body strength training may decrease symptoms for people who have lymphedema. Some experts recommend that people wear a lymphedema sleeve when they do upper-body exercises.

Supporting your physical activity habit

BECAUSE PHYSICAL ACTIVITY IS SO IMPORTANT to your health, maybe even lowering the risk of breast cancer recurrence, it's well worth making it a long-term habit.

Start—or keep—moving

It can be hard to make and stick with health changes, but you can do it! People who stick with physical activity often rely on a plan. As you work on your plan, try these strategies.

Pick a goal

Whether you're a current exerciser or a beginner, try setting an exercise goal.

Make your goal specific (exactly what you will do) and realistic (something you can do). "I want to exercise more" is not specific. Think of a goal like, "I will walk at least 30 minutes, 5 days a week."

To reach your goal, you can exercise for a short time every day or for a longer time a few days a week. Do what's best for you. Exercise should last at least 10 minutes before counting toward your goal.

Track your progress

Keeping a record or log of your progress can help you achieve and maintain your goal. You could track total distance, number of steps using a pedometer, or minutes you exercise each day.

A log shows how you're doing day to day, and how close you are to your goal. You can find printable logs online to download, or you could try a tracking app on your phone.

Take small steps

If you are just beginning to exercise, or starting up again, be realistic; don't try to ramp up all at once.

If you are new to it, start with a goal of walking 20 minutes a day (or until you reach 5,000 steps a day). Gradually add time or steps each day until you reach your long-term goal.

Be patient

Because treatments may leave you with less energy, re-think your workouts as needed. You might need to switch activities or stop exercising temporarily. Try not to get discouraged. Most people who try to exercise are successful. Listen to your body and be patient.

Break down barriers

These suggestions may help common activity barriers:

Breast cancer /treatment barriers

EXHAUSTION. Your treatment may make you tired. But moderate exercise (like walking briskly or riding a bike) makes your blood circulate better and brings more oxygen to your brain. This can make you feel more energized and ready for more activity.

SLEEP. Good, sound sleep is as important as exercise. Exercise will help you sleep better and feel more rested. You may also need naps, even if you've never been a napper. If you're tired, allow yourself a 5- to 10-minute nap.

DEPRESSION. There may be days when you're depressed or angry about your diagnosis, or worn out. It's OK to skip a day or do less than planned. Just try to get some physical activity on most days of the week.

WORKOUT COMFORT. The right athletic clothing can increase exercise comfort and confidence. Consider workout gear designed for people with breast cancer, including bathing suits, sports bras, and sun-protective clothing. Look online, in specialty intimate apparel stores, or in boutiques at cancer centers (see our “Resources” handout).

Some people wear a wig when exercising; others prefer not to wear anything on their heads. Additional options are a scarf, headwrap, or hat. Some have a second wig for working out. Do what feels best for you, or try options until you find what works best.

General barriers

Other things can get in the way of activity, but there are good ways to move past them:

NO TIME. You may be exercising daily and not be counting it! If you walk for exercise, include steps from your commute and other daily activities. For more steps, get off the train or bus one stop early, park farther away, or take the stairs.

BAD WEATHER. If you exercise outside in the winter, wear extra clothing in layers. You may feel chilly at first, but walking briskly or jogging will quickly warm you up.

GETTING BORED EASILY. Try different activities or something you’ve always wanted to do.

Stick with it!

Given the long-term benefits of exercise, it’s important to get on track and stay there. Try these tips:

Build a routine

If you exercise occasionally, try for more regularity. Set aside dedicated time, make it a priority, and keep to a schedule. Consistency will be a huge help while facing changes from breast cancer and treatment. If you exercise regularly, keep up the good work.

Buddy up

Studies show that physical activity is easier with support, so choose an exercise buddy(s)! Look for someone who:

- Has helped you before
- You can count on
- Will cheer you on
- Has helped you make other changes
- Makes you feel good about yourself
- Is willing and able to exercise with you

Keep on tracking

It’s common to “drift” from new activity habits. It may happen so slowly that you don’t even realize it. Fight this by tracking regularly. Seeing your progress can motivate you.

Don’t let setbacks set you back!

Everyone will have setbacks. There may be days when you can’t or don’t want to exercise or feel worn out. Allow yourself those days off. Then get back to exercising as soon as you can.

Reward yourself

Whether new to physical activity or a pro, pat yourself on the back whenever you reach a goal. Be proud of all you are doing for yourself. Do what you can, when you can, and reward yourself. You deserve it!

To learn more about physical activity during and after treatment, as well as the other topics in this booklet, visit youngandstrong.dana-farber.org or ask your doctor.



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